THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte REZA ZOUGHI and SASAN BAKHTIARI

Appeal No. 96-2274 Application No. 08/291,354¹

ON BRIEF

Before KRASS, JERRY SMITH, and FLEMING, Administrative Patent Judges.

FLEMING, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed August 16, 1994. According to appellants this application is a continuation of Application No. 08/036,941, filed March 25, 1993, now abandoned; which is a continuation of Application No. 07/960,238, filed October 13, 1992, now U.S. Patent No. 5,216,372, issued June 1, 1993; which is a continuation of Application No. 07/737,344, filed July 29, 1991, now abandoned.

This is a decision on appeal from the final rejection of claims 18 through 21, 25 and 27 through 31. Claims 1 through 17, 22 through 24, and 26 have been canceled. After the final

rejection, Appellants filed an amendment canceling claim 31 which was entered by the Examiner. Therefore, claims 18 through 21, 25 and 27 through 30 are properly before us for our consideration on appeal.

The invention relates to a method and apparatus for using microwave technology to precisely measure the thickness of the layers of rubber covering the steel belts within a tire as a function of the phase of the reflected microwave signal.

Independent claim 18 is reproduced as follows:

18. A method for making a determination related to thickness of a material using microwave signals, comprising:

providing an apparatus for generating a transmitted microwave signal;

locating said apparatus relative to the material; sending said transmitted microwave signal towards the material using said apparatus and causing said transmitted signal to be incident on the material;

receiving using said apparatus a reflected microwave signal reflected by the material;

extracting information from said transmitted signal; extracting information from said reflected signal; determining a value using said extracted information

from said transmitted signal and said extracted from said reflected signal, with said value information of an effective reflection coefficient, related to phase said effective reflection coefficient related to a ratio of said transmitted microwave signal and said reflected signal, said determining step being dependent on microwave any distance between said apparatus and the material and, when a distance is present between said apparatus and the material, said determining step includes taking into account said distance and

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finding a thickness of the material using said value related to said phase.

The Examiner does not rely on any references for the rejection.

The specification is objected to under 35 U.S.C. § 112, first paragraph, for failing to provide an adequate written description of the invention. Claims 18 through 21, 25 and 27 through 30 stand rejected for the reasons set forth in the objection to the specification. Claims 18 through 21, 25 and 27 through 30 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention.

Rather than repeat the arguments of Appellants or the $\mbox{Examiner}$, we make reference to the \mbox{briefs}^2 and the answer for

²Appellants filed an appeal brief on November 20, 1995. Appellants filed a reply appeal brief on March 25, 1996. The Examiner stated in the Examiner's letter mailed April 19, 1996 that the reply brief has been entered and considered but no further response by the Examiner is deemed necessary.

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the details thereof.

OPINION

After a careful review of the evidence before us, we do not agree with the Examiner that claims 18 through 21, 25 and 27 through 30 are properly rejected under 35 U.S.C. § 112.

It is not clear whether the Examiner is objecting to the specification on the basis of written description or enablement. Our reviewing court has made it clear that written description and enablement are separate requirements under the first paragraph of 35 U.S.C. § 112. Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1560, 19 USPQ2d 1111, 1114 (Fed. Cir. 1991). Thus, we will treat these two issues separately.

"The function of the description requirement [of the first paragraph of 35 U.S.C. 112] is to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him." *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). "It is not necessary that the application

describe the claim limitations exactly, . . . but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations." Wertheim, 541 F.2d at 262, 191 USPQ at 96 citing In re Smythe, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973). Furthermore, the Federal Circuit points out that "[i]t is not necessary that the claimed subject matter be described identically, but the

disclosure originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed." In re Wilder, 736 F.2d 1516, 1520, 222 USPQ 369, 372 (Fed. Cir. 1984), cert. denied, 469 U.S. 1209 (1985), citing In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983).

On page 3 of the answer, the Examiner argues that

Appellants' claims 18 and 25 require separate and independent readings of the transmitted and received signals. The

Examiner argues that no such approach has been disclosed by Appellants. From this argument, it appears that the Examiner is arguing that the originally filed specification fails to provide a description of separate and independent readings of the transmitted and received signals as now later claimed by Appellants.

In the reply brief, Appellants argue that the scope of claims 18 and 25 encompasses the preferred embodiment as shown in Figure 1 in which the standing wave made up of both the transmitted and received signals as well as the embodiment in which the signals are separately read. Appellants argue that

they are not precluded from encompassing other embodiments in the broadest aspects of their claimed invention.

We agree with Appellants that they are not precluded from claiming in such a way as to encompass other embodiments, however, we do not have to reach this holding for this issue here. We note on page 18 of the originally-filed specification the following is found:

The preceding discussion has assumed that the transmitting and receiving functions are combined in a single waveguide. This is the preferred embodiment of the present invention. However, it would be possible to implement the present invention with separate transmitter and receiver which determines the phase shift of the reflected signal with respect to the transmitted signal.

From this description, we find that Appellants did have possession, as of the filing date of the application relied on, of the specific subject matter later claimed by them.

Thus, we will not sustain the rejection on the basis of written description.

Now, we will turn to the rejection based upon enablement. In order to comply with the enablement provision of 35 U.S.C.

§ 112, first paragraph, the disclosure must adequately describe the claimed invention so that the artisan could practice it without undue experimentation. In re Scarbrough, 500 F.2d 560, 565, 182 USPQ 298, 302 (CCPA 1974); In re Brandstadter, 484 F.2d 1395, 1405-06, 179 USPQ 286, 294 (CCPA 1973); and In re Gay, 309 F.2d 769, 772, 135 USPQ 311, 315 (CCPA 1962). If the Examiner had a reasonable basis for questioning the sufficiency of the disclosure, the burden shifted to the Appellant to come forward with evidence to rebut this challenge. *In re Doyle*, 482 F.2d 1385, 1392, 179 USPQ 227, 232 (CCPA 1973), cert. denied, 416 U.S. 935 (1974); In re Brown, 477 F.2d 946, 950, 177 USPQ 691, 694 (CCPA 1973); and In re Ghiron, 442 F.2d 985, 991, 169 USPQ 723, 728 (CCPA 1971). However, the burden was initially upon the Examiner to establish a reasonable basis for questioning the adequacy of the disclosure. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563 (CCPA 1982); In re Angstadt, 537 F.2d 498, 502, 190 USPO 214, 218 (CCPA 1976); and In re Armbruster, 512 F.2d 676, 677, 185 USPQ 152, 153 (CCPA 1975).

The Examiner argues that the specification on page 18 fails to disclose any structure to any degree of enabling detail. Appellants argue on page 3 of the reply brief that the Examiner has only stated a conclusion. Appellants point out that the Examiner did not provide any support for this conclusion.

Upon a careful review of the record, we find that the Examiner did not have a reasonable basis for questioning the sufficiency of the disclosure, and thereby the burden did not shift to the Appellants to come forward with evidence to rebut

this challenge. We note that the Examiner has not provided any reasonable basis for questioning the adequacy of the disclosure. Furthermore, without any basis provided by the Examiner, we do find that one of ordinary skill in the art with only routine

experimentation would have been able to make and use a system that has the capability to separately measure the transmitted and received signals to obtain the phase difference between these signals. Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 112, first paragraph.

Claims 18 through 21, 25 and 27 through 30 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention. Analysis of 35 U.S.C. § 112, second paragraph, should begin with the determination of whether claims set out and circumscribe the particular area with a reasonable degree of precision and particularity; it is here where definiteness of the language must be analyzed, not in a vacuum, but always in light of teachings of the disclosure as it would be interpreted by one possessing ordinary skill in the art. In re Johnson, 558 F.2d

1008, 1015, 194 USPQ 187, 193 (CCPA 1977), citing In re Moore, 439 F. 2d 1232, 1235, 169 USPQ 236, 238 (1971). Furthermore, our reviewing court points out that a claim which is of such breadth that it reads on subject matter disclosed in the prior art is rejected under 35 U.S.C. § 102 rather than under 35 U.S.C. § 112, second paragraph. See In re Hyatt, 708 F.2d 712, 715, 218 USPQ

195, 197 (Fed. Cir. 1983) and *In re Borkowski*, 422 F.2d 904, 909, 164 USPQ 642, 645-46 (CCPA 1970).

Appellants point out on page 17 of the brief that the Examiner has not offered any salient points or cogent reasoning for rejecting Appellants' claims under 35 U.S.C. § 112, second paragraph. We also fail to find that the Examiner has provided any reasons for this rejection. Without the benefit of the Examiner's specific reasoning, we find that the claims set out and circumscribe the invention with a reasonable degree of precision and particularity in light of teachings of the disclosure as it would be interpreted by one possessing ordinary skill in the art. Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 112, second paragraph.

In view of the foregoing, the decision of the Examiner rejecting claims 18 through 21, 25 and 27 through 30 is reversed.

REVERSED

ERROL A. KRASS Administrative Patent Judge)))
JERRY SMITH Administrative Patent Judge))) BOARD OF PATENT) APPEALS) AND) INTERFERENCES)
MICHAEL R. FLEMING Administrative Patent Judge)))

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REVERSED

Prepared: January 21, 2000